

We Claim:

1. An installation for fabricating semiconductor products,
comprising:

fabrication units configured to operate in a clean room;

a transport system including a portal crane installation for supplying the semiconductor products to said fabrication units, said portal crane installation including two parallel crane tracks and a carrier, said two parallel crane tracks extending above said fabrication units, said carrier extending transverse to said two parallel crane tracks, and said carrier having longitudinal ends movably mounted in said two parallel crane tracks; and

a transport container movably mounted to said carrier such that said transport container is guidable over said fabrication units and is lowerable to said fabrication units.

how?

2. The installation according to claim 1, wherein said carrier includes bogies respectively disposed at said longitudinal ends of said carrier.

3. The installation according to claim 2, wherein each of said two parallel crane tracks includes a rail guide for a respective one of said bogies.

4. The installation according to claim 1, including support pillars, said two parallel crane tracks being supported on said support pillars.

5. The installation according to claim 1, wherein said transport container is movable along said carrier.

6. The installation according to claim 5, wherein:

said carrier includes a rail guide; and

said portal crane installation includes a bogie guided in said rail guide and holding said transport container.

7. The installation according to claim 6, wherein:

said portal crane installation includes a holding device extendible in a vertical direction; and

said transport container is fixed to said bogie via said holding device.

8. The installation according to claim 7, wherein said portal crane installation includes a swivel mechanism disposed between said holding device and said transport container, said

swivel mechanism moves said transport container horizontally relative to said holding device for fine positioning said transport container.

9. The installation according to claim 1, including a numerical control system controlling a travel path of said transport container along said carrier.

10. The installation according to claim 1, wherein said portal crane installation includes drives with respective encapsulations.

11. The installation according to claim 10, wherein said encapsulations are explosion-proof encapsulations.

12. The installation according to claim 2, wherein said bogies have respective encapsulations.

13. The installation according to claim 6, wherein said bogie has an encapsulation.

14. The installation according to claim 2, wherein said two parallel crane tracks have contact surfaces in contact with said bogies, said contact surfaces and said bogies are formed of a wear-proof, non-outgassing material.

15. The installation according to claim 6, wherein said rail guide of said carrier has a contact surface in contact with said bogie, said contact surface and said bogie are formed of a wear-proof, non-outgassing material.

~~16. The installation according to claim 1, including a central control system controlling said portal crane installation.~~

~~17. The installation according to claim 1, wherein said portal crane installation is configured to extend across the entire clean room.~~

~~18. The installation according to claim 1, including a further portal crane installation, said portal crane installation and said further portal crane installation being configured to be disposed next to one another in the clean room.~~

not shown

~~19. The installation according to claim 1, including a further portal crane installation, said portal crane installation and said further portal crane installation being configured to be disposed one behind another in the clean room.~~

not shown

~~20. The installation according to claim 1, wherein said portal crane installation includes a further carrier and a further transport container movably mounted to said further carrier,~~

not shown

said further carrier moves on said two parallel crane tracks of said portal crane installation.

21. The installation according to claim 20, wherein said carrier and said further carrier are individually movable in said portal crane installation.

22. The installation according to claim 1, wherein said portal crane installation includes a further transport container, said transport container and said further transport container are movably mounted one behind another to said carrier.

not shown

23. The installation according to claim 22, wherein said transport container and said further transport container are individually movable.

24. The installation according to claim 1, wherein said fabrication units and said transport system are configured to process semiconductor wafers.

25. A plant for fabricating semiconductor products, comprising:

a clean room;

fabrication units disposed in said clean room;

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a transport system including a portal crane installation for supplying the semiconductor products to said fabrication units, said portal crane installation including two parallel crane tracks and a carrier, said two parallel crane tracks extending above said fabrication units, said carrier extending transverse to said two parallel crane tracks, and said carrier having longitudinal ends movably mounted in said two parallel crane tracks; and

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a transport container movably mounted to said carrier such that said transport container is guidable over said fabrication units and is lowerable to said fabrication units.